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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2024 Navy **Date:** March 2023

<b>Appropriation/Budget Activity</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy / BA 4: Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0603851M / <i>Joint Non-Lethal Weapons Testing</i>
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COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	654.013	27.556	30.533	31.058	-	31.058	33.837	33.885	33.888	34.577	Continuing	Continuing
2319: <i>Non-Lethal Weapons</i>	654.013	27.556	30.533	31.058	-	31.058	33.837	33.885	33.888	34.577	Continuing	Continuing

**A. Mission Description and Budget Item Justification**

The DoD Non-Lethal Weapons Program was established by the FY 1996 National Defense Authorization Act. The Office of the Secretary of Defense designated the Commandant of the Marine Corps as the DoD NLW Executive Agent (EA). The EA exercises centralized responsibility for joint research and development of non-lethal weapons and technology through the Joint Non-Lethal Weapons Program (JNLWP). The Office of the Under Secretary of Defense for Acquisition and Sustainment serves as the OSD Principal Staff Assistant and oversees, in consultation with the Under Secretary of Defense for Policy, the DoD NLW Executive Agent.

The efforts described in this Program Element (PE) reflect Joint Service research and development (R&D) investment decisions by the Joint Non-Lethal Weapons Integrated Product Team, a multi-service flag level corporate board that provides executive oversight and management of the JNLWP for the EA. Research conducted is based on the requirements and capabilities sought by the Services and the Coast Guard, as identified in JROC-approved Joint Non-Lethal Effects Initial Capabilities Documents. This coordinated Joint Research and Development approach addresses mutual capability gaps and assures the most relevant non-lethal technologies, capabilities, and equipment are provided to the Joint Force while eliminating duplicative Service investment. Advanced Component Development and Prototypes non-lethal weapons initiatives provide non-lethal capabilities in direct support of the National Defense Strategy objective of strategic competition by providing options to the Joint Force in pursuit of national objectives in legal or policy constrained scenarios, as well as complementing the use of lethal effects in complex combat scenarios, for example, in urban environments with large civilian populations. Ongoing NLW studies, analyses, and exercise efforts with NATO and Allies also support NDS objectives to strengthen alliances and partnerships. Resulting capabilities facilitate a fully integrated non-lethal competency as a complement to lethal firepower, providing force application options for below lethal threshold engagements.

This PE funds Joint Service research, development, test, and evaluation of non-lethal weapons, devices, munitions, and technologies which provide a non-lethal capability to minimize significant injuries as well as undesired damage to property and the environment. Counter-personnel and counter-materiel capability investment areas include directed energy (lasers, millimeter wave, and high power microwave), multi-sensory suppression/incapacitation initiatives (acoustics, optical, electro-muscular incapacitation), and other emergent technologies transitioning from coordinated JNLWP Science and Technology PE initiatives. Investments also focus on Joint and allied experimentation, exercise, demonstration, and assessment of advanced component and prototype initiatives in order to assist transition of suitable and effective capabilities to both joint and allied operational applications.

The Joint Intermediate Force Capabilities Office JIFCO (formally Joint Non-Lethal Weapons Directorate) is designated as a R&D organization and was established by the EA to manage the day to day research and development activities of the DoD's JNLWP. Each Service is responsible for their procurement and operating support costs.

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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2024 Navy	<b>Date:</b> March 2023
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<b>Appropriation/Budget Activity</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy / BA 4: Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0603851M / <i>Joint Non-Lethal Weapons Testing</i>
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<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024 Base</b>	<b>FY 2024 OCO</b>	<b>FY 2024 Total</b>
Previous President's Budget	28.168	30.533	32.370	-	32.370
Current President's Budget	27.556	30.533	31.058	-	31.058
Total Adjustments	-0.612	0.000	-1.312	-	-1.312
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.612	0.000			
• Program Adjustments	0.000	0.000	-1.437	-	-1.437
• Rate/Misc Adjustments	0.000	0.000	0.125	-	0.125

**Change Summary Explanation**

Increase from FY 2023 to FY 2024 of \$0.525M is primarily due to inflation.

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**Exhibit R-2A, RDT&E Project Justification:** PB 2024 Navy **Date:** March 2023

<b>Appropriation/Budget Activity</b> 1319 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603851M / <i>Joint Non-Lethal Weapons Testing</i>	<b>Project (Number/Name)</b> 2319 / <i>Non-Lethal Weapons</i>
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COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
2319: <i>Non-Lethal Weapons</i>	654.013	27.556	30.533	31.058	-	31.058	33.837	33.885	33.888	34.577	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

This project Non-Lethal Weapons (NLW) develops and fields NLW intermediate force capabilities between presence and lethal effects in support of national interests.

**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
<b>Title:</b> Counter-Personnel Advanced Component Development and Prototypes	4.914	8.638	8.376	0.000	8.376
<b>Articles:</b>	-	-	-	-	-
<b>FY 2023 Plans:</b>					
<ul style="list-style-type: none"> <li>- Initiate Intermediate Force Capabilities Unmanned System Integration (IFCUSI) integration Initiate development of a ruggedized demonstrator, integrated onto an unmanned or autonomous platform, as appropriate, for identified stakeholders.</li> <li>- Initiate Integrated Base Defense (IBD) mature IFC integration into a containerized weapon system prototype demonstrator.</li> <li>- Continue maturation of counter-personnel (CP) directed energy technologies to increase system efficiencies and reduce system size, weight, and cost in preparation for transition to joint acquisition programs of record.</li> <li>- Continue development of CP emerging technologies to support Service capability gaps and priorities as they support the Combatant Commanders.</li> <li>- Continue technology maturation and risk reduction of competing approaches to inform decisions for Service capability development.</li> <li>- Continue prototype development and assessment of advanced payloads for technological capabilities relevant to emerging counter-personnel capability gaps.</li> <li>- Continue coordination and requirements development for Service counter-personnel (CP) prototyping initiatives within the Joint Non-Lethal Weapons Program.</li> <li>- Continue Service-led CP intermediate force prototype initiatives.</li> <li>- Continue prototype development and demonstration for the most promising technologies employing multisensory stimuli.</li> <li>- Continue program management support for CP efforts.</li> </ul>					

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2024 Navy		<b>Date:</b> March 2023
<b>Appropriation/Budget Activity</b> 1319 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603851M / <i>Joint Non-Lethal Weapons Testing</i>	<b>Project (Number/Name)</b> 2319 / <i>Non-Lethal Weapons</i>

**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
<ul style="list-style-type: none"> <li>- Continue integration of current intermediate force capabilities into an established service platform for demonstration and prototyping purposes.</li> <li>- Continue sound and light acoustic technology evaluation.</li> <li>- Continue Escalation of Force Common Remotely Operated Weapons Station (EoFCROWS).</li> <li>- Complete sound and light high intensity light evaluation.</li> </ul> <p><b><i>FY 2024 Base Plans:</i></b></p> <ul style="list-style-type: none"> <li>- Continue Intermediate Force Capabilities Unmanned System Integration (IFCUSI) Initiate development of a ruggedized demonstrator, integrated into an unmanned or autonomous platform, as appropriate, for identified stakeholders.</li> <li>- Continue Integrated Base Defense (IBD) mature integration of IFCs into a containerized weapon system prototype demonstrator.</li> <li>- Continue maturation of counter-personnel (CP) directed energy technologies to increase system efficiencies, reduce system size, weight, and cost in preparation for transition to joint acquisition programs of record.</li> <li>- Continue development of CP emerging technologies to support Service capability gaps and priorities as they support the Combatant Commanders.</li> <li>- Continue technology maturation and risk reduction of competing approaches to inform decisions for Service capability development of Directed Energy.</li> <li>- Continue prototype development and assessment of advanced payloads for technological capabilities relevant to emerging counter-personnel capability gaps.</li> <li>- Continue coordination and requirements development for Service counter-personnel (CP) prototyping initiatives within the Joint Non-Lethal Weapons Program.</li> <li>- Continue Service-led CP intermediate force prototype initiatives.</li> <li>- Continue prototype development and demonstration for the most promising technologies employing multisensory stimuli.</li> <li>- Continue program management support for CP efforts.</li> <li>- Continue integration of current intermediate force capabilities into an established service platform for demonstration and prototyping.</li> <li>- Continue sound and light acoustic technology evaluation.</li> <li>- Complete Escalation of Force effector integration and testing on Common Remotely Operated Weapons Station (EoF CROWS).</li> </ul> <p><b><i>FY 2024 OCO Plans:</i></b></p>					

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2024 Navy		<b>Date:</b> March 2023
<b>Appropriation/Budget Activity</b> 1319 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603851M / <i>Joint Non-Lethal Weapons Testing</i>	<b>Project (Number/Name)</b> 2319 / <i>Non-Lethal Weapons</i>

<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024 Base</b>	<b>FY 2024 OCO</b>	<b>FY 2024 Total</b>
N/A					
<b><i>FY 2023 to FY 2024 Increase/Decrease Statement:</i></b> Decrease from FY 2023 to FY 2024 is due to Unmanned System integration efforts focused on continued requirements development and novel prototype identification to support lower risk prototype development planning due to Service integration plan changes.					
<b><i>Title:</i></b> Counter-Materiel Advanced Component Development and Prototypes	13.549	10.100	11.906	0.000	11.906
<b><i>Articles:</i></b>	-	-	-	-	-
<b><i>FY 2023 Plans:</i></b> <ul style="list-style-type: none"> <li>- Initiate Vessel Stopping Prototype to conduct system Factory Acceptance Testing and comprehensive planning for waterborne requirements verification Government Acceptance Testing, and executing DoN major safety and regulatory milestones.</li> <li>- Continue advanced component development and prototyping support to the Department of the Navy's candidate Maritime Vessel Stopping capability. (Vessel Stopping Prototype)</li> <li>- Continue development of the conceptual design of non-lethal directed energy vessel-stopping capability, including electromagnetic and engagement modeling, platform feasibility and integration studies, target characterization, and validation.</li> <li>- Continue maturation of counter-materiel (CM) directed energy technologies to increase system efficiencies and reduce system size, weight, and cost in preparation for transition to joint acquisition programs of record.</li> <li>- Continue coordination and requirements development for Service CM prototyping initiatives within the Joint Non-Lethal Weapons Program.</li> <li>- Continue development and assessment of Service-led CM intermediate force prototype initiatives.</li> <li>- Continue maturation of CM directed energy technologies to increase system efficiencies such as reduce system size, weight, and cost in preparation for transition to joint acquisition programs of record.</li> <li>- Continue the advanced development of CM emerging technologies to support Service capability gaps and priorities as they support the Combatant Commanders.</li> <li>- Continue technology maturation and risk reduction of competing approaches to inform decisions for Service capability development.</li> <li>- Continue prototype development and assessment of advanced payloads for technological capabilities relevant to emerging counter-materiel capability gaps.</li> <li>- Continue program management support for CM efforts.</li> </ul>					
<b><i>FY 2024 Base Plans:</i></b>					

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2024 Navy		<b>Date:</b> March 2023
<b>Appropriation/Budget Activity</b> 1319 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603851M / <i>Joint Non-Lethal Weapons Testing</i>	<b>Project (Number/Name)</b> 2319 / <i>Non-Lethal Weapons</i>

<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024 Base</b>	<b>FY 2024 OCO</b>	<b>FY 2024 Total</b>
<ul style="list-style-type: none"> <li>- Continue Vessel Stopping Prototype to conduct system Factory Acceptance Testing and comprehensive planning for waterborne requirements verification Government Acceptance Testing and executing DoN major safety and regulatory milestones.</li> <li>- Continue development of the conceptual design of non-lethal directed energy vessel-stopping capability, including electromagnetic and engagement modeling, platform feasibility and integration studies, target characterization, and validation.</li> <li>- Continue maturation of counter-materiel (CM) directed energy technologies to increase system efficiencies, reduce system size, weight, and cost in preparation for transition to joint acquisition programs of record.</li> <li>- Continue coordination and requirements development for Service CM prototyping initiatives within the Joint Non-Lethal Weapons Program.</li> <li>- Continue development and assessment of Service-led CM intermediate force prototype initiatives.</li> <li>- Continue the advanced development of CM emerging technologies to support Service capability gaps and priorities as they support the Combatant Commanders.</li> <li>- Continue technology maturation and risk reduction of competing approaches to inform decisions for Service capability development.</li> <li>- Continue prototype development and assessment of advanced payloads for technological capabilities relevant to emerging counter-materiel capability gaps.</li> <li>- Continue program management support for CM efforts.</li> <li>- Complete advanced component development and prototyping support to the Department of the Navy's candidate Maritime Vessel Stopping capability. (Vessel Stopping Prototype)</li> </ul> <p><b>FY 2024 OCO Plans:</b> N/A</p> <p><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b> Increase from FY 2023 to FY 2024 is due to increased interest by multiple Services in short range Directed Energy prototype development.</p>					
<p><b>Title:</b> Joint and Allied Exercise, Experimentation, Demonstration, and Assessment</p> <p align="right"><b>Articles:</b></p>	9.093	11.795	10.776	0.000	10.776
<p><b>FY 2023 Plans:</b></p> <ul style="list-style-type: none"> <li>- Continue support to Combatant Commands (CCMDs) by demonstrating and assessing intermediate force capabilities in vessel interdiction and counter-migration exercises. Specifically, continue support to USEUCOM/USAFRICOM through engagement with NATO's Maritime Interdiction Operations Training Center (MIOTC).</li> </ul>	-	-	-	-	-

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**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024 Base</b>	<b>FY 2024 OCO</b>	<b>FY 2024 Total</b>
<ul style="list-style-type: none"> <li>- Continue modeling and simulation of intermediate force capabilities in warfighter training/gaming models and performance effects data collection/population to demonstrate/analyze non-lethal effects and support optimization of training.</li> <li>- Continue evaluation of intermediate force capabilities by Service warfighting laboratories and Joint Staff, J7, Joint and Coalition Warfighting for direct user feedback of various non-lethal (NL) technologies and munitions to include policy and strategy and strategic communication.</li> <li>- Continue engagement with NATO on cooperative security efforts, to include providing input for Systems Analysis and Studies (SAS) Panels and NATO assessment of intermediate force capabilities in appropriate allied scenarios and exercises.</li> <li>- Continue interaction with Combatant Commander Staffs to evaluate emerging intermediate force capabilities and their utility in theater operations and Defense of the Homeland missions.</li> <li>- Continue to assess the utility, effect, and effectiveness of technologies for incapacitating personnel, clearing facilities, stopping vehicles and vessels, and denying enemy access to protected areas.</li> <li>- Continue to identify, test, and evaluate newly developed commercial products that may meet Joint service requirements for specific non-lethal capability set common items.</li> <li>- Continue program management support for Joint and Allied Exercise, Experimentation, Demonstration, and Assessment efforts.</li> <li>- Continue support of CCMDs by demonstrating and assessing intermediate force capabilities for multiple priority mission areas, such as port opening operations; Humanitarian Assistance and Disaster Relief, Counter-Transnational Organized Crime operations; and harbor and in-transit security operations</li> </ul> <p><b><i>FY 2024 Base Plans:</i></b></p> <ul style="list-style-type: none"> <li>- Continue support to Combatant Commands (CCMDs) by demonstrating and assessing intermediate force capabilities in vessel interdiction and counter-migration exercises.</li> <li>- Continue modeling and simulation of intermediate force capabilities in warfighter training/gaming models and performance effects data collection/population to demonstrate/analyze non-lethal effects and support optimization of training.</li> <li>- Continue evaluation of intermediate force capabilities by Service warfighting laboratories and Joint Staff, J7, Joint and Coalition Warfighting for direct user feedback of various non-lethal (NL) technologies and munitions to include policy and strategy and strategic communication.</li> </ul>					

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2024 Navy		<b>Date:</b> March 2023
<b>Appropriation/Budget Activity</b> 1319 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603851M / <i>Joint Non-Lethal Weapons Testing</i>	<b>Project (Number/Name)</b> 2319 / <i>Non-Lethal Weapons</i>

<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024 Base</b>	<b>FY 2024 OCO</b>	<b>FY 2024 Total</b>
<ul style="list-style-type: none"> <li>- Continue engagement with NATO on cooperative security efforts, to include providing input for Systems Analysis and Studies (SAS) Panels and NATO assessment of intermediate force capabilities in appropriate allied scenarios and exercises.</li> <li>- Continue interaction with Combatant Commander Staffs to evaluate emerging intermediate force capabilities and their utility in theater operations and Defense of the Homeland missions.</li> <li>- Continue to assess the utility, effect, and effectiveness of technologies for incapacitating personnel, clearing facilities, stopping vehicles and vessels, and denying enemy access to protected areas.</li> <li>- Continue to identify, test, and evaluate newly developed commercial products that may meet Joint service requirements for specific non-lethal capability set common items.</li> <li>- Continue program management support for Joint and Allied Exercise, Experimentation, Demonstration, and Assessment efforts.</li> <li>- Continue support of CCMDs by demonstrating and assessing intermediate force capabilities for multiple priority mission areas, such as port opening operations; Humanitarian Assistance and Disaster Relief, Contested Logistics; and harbor and in-transit security operations.</li> </ul> <p><b>FY 2024 OCO Plans:</b> N/A</p> <p><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b> Decrease from FY 2023 to FY 2024 is due to improved efficiencies across many projects and efforts. Resources due to cost savings were reallocated for high priority technology development efforts.</p>					
<b>Accomplishments/Planned Programs Subtotals</b>	27.556	30.533	31.058	0.000	31.058

<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<u>Line Item</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024 Base</u>	<u>FY 2024 OCO</u>	<u>FY 2024 Total</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• RDTEN/0602651M/0000: <i>Joint Non-Lethal Weapons Applied Research</i>	6.213	6.659	7.419	-	7.419	8.090	8.345	8.512	8.682	Continuing	Continuing
• RDTEN/0603651M/3022: <i>Joint Non-Lethal Weapons Advanced Technology Development</i>	13.026	14.048	15.556	-	15.556	16.967	17.504	17.855	18.212	Continuing	Continuing

**Remarks**

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2024 Navy		<b>Date:</b> March 2023
<b>Appropriation/Budget Activity</b> 1319 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603851M / <i>Joint Non-Lethal Weapons Testing</i>	<b>Project (Number/Name)</b> 2319 / <i>Non-Lethal Weapons</i>

**D. Acquisition Strategy**

The Joint Non-Lethal Weapons (JNLW) program strategy is to pursue the fielding of NLW systems through modifying commercial-off-the-shelf (COTS) products for near term capabilities and the development of new technology NLW systems in various stages of acquisition. These are balanced with efforts in state-of-the-art technology investment, experimentation, and modeling and simulation. The acquisition strategy for each weapon system is largely Lead Service dependent. For complex development programs, JNLWP RDT&E funding supports each Service's RDT&E joint application efforts.

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy** **Date:** March 2023

<b>Appropriation/Budget Activity</b> 1319 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603851M / <i>Joint Non-Lethal Weapons Testing</i>	<b>Project (Number/Name)</b> 2319 / <i>Non-Lethal Weapons</i>
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<b>Product Development (\$ in Millions)</b>				<b>FY 2022</b>		<b>FY 2023</b>		<b>FY 2024 Base</b>		<b>FY 2024 OCO</b>		<b>FY 2024 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
NLW Product Development	MIPR	ARDEC : Picatinny, NJ	62.838	0.708	Jan 2022	1.100	Jan 2023	0.605	Jan 2024	-		0.605	Continuing	Continuing	Continuing
NLW Product Development	Various	NSWC : Various	71.577	7.162	Dec 2021	9.269	Dec 2022	7.163	Dec 2023	-		7.163	Continuing	Continuing	Continuing
NLW Product Development	MIPR	USAF : Ft. Sam Houston AFB, TX	60.727	0.412	Jan 2022	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
NLW Product Development	Various	MCSC : Quantico, VA	40.915	4.440	Nov 2021	4.696	Nov 2022	6.273	Nov 2023	-		6.273	Continuing	Continuing	Continuing
NLW Product Development	Various	Uniformed Services : Various	207.348	5.391	Oct 2021	6.567	Oct 2022	6.387	Oct 2023	-		6.387	Continuing	Continuing	Continuing
Prior Year NLW Product Development	Various	Various : Various	91.741	0.000		0.000		0.000		-		0.000	0.000	91.741	-
<b>Subtotal</b>			535.146	18.113		21.632		20.428		-		20.428	Continuing	Continuing	N/A

**Remarks**  
 Joint Program funds are prioritized and provided to the USA, USAF, USN, USMC, SOCOM, and USCG in support of NLW research and development efforts. Each Cost Category Item does not correlate to an individual project/effort. They fund multiple non-lethal projects/efforts that are incrementally funded throughout the fiscal year as each service identifies the project/effort requiring funding.

<b>Support (\$ in Millions)</b>				<b>FY 2022</b>		<b>FY 2023</b>		<b>FY 2024 Base</b>		<b>FY 2024 OCO</b>		<b>FY 2024 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
NLW Support Cost	WR	NSWC : Dahlgren, VA	19.629	1.121	Nov 2021	0.277	Nov 2022	0.230	Nov 2023	-		0.230	Continuing	Continuing	Continuing
<b>Subtotal</b>			19.629	1.121		0.277		0.230		-		0.230	Continuing	Continuing	N/A

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy** **Date:** March 2023

<b>Appropriation/Budget Activity</b> 1319 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603851M / <i>Joint Non-Lethal Weapons Testing</i>	<b>Project (Number/Name)</b> 2319 / <i>Non-Lethal Weapons</i>
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<b>Management Services (\$ in Millions)</b>				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
JNLW Management Support	Various	MCSC : Quantico, VA	58.517	8.322	Oct 2021	8.624	Oct 2022	10.400	Oct 2023	-		10.400	Continuing	Continuing	Continuing
Prior Year Management Services	Various	Various : Various	40.721	0.000		0.000		0.000		-		0.000	0.000	40.721	-
<b>Subtotal</b>			99.238	8.322		8.624		10.400		-		10.400	Continuing	Continuing	N/A

**Remarks**  
 The JNLW Management Support was previously incorporated into the various cost categories instead of being displayed in the corresponding section of the R-3. The Management Services section of the R-3 now reflects the amounts for civilian salaries and contractor program management. The funding fluctuates across the R-2A categories based on the demand signals of the Services, USSOCOM, and the USCG.

	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>	654.013	27.556	30.533	31.058	-	31.058	Continuing	Continuing	N/A

**Remarks**

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy

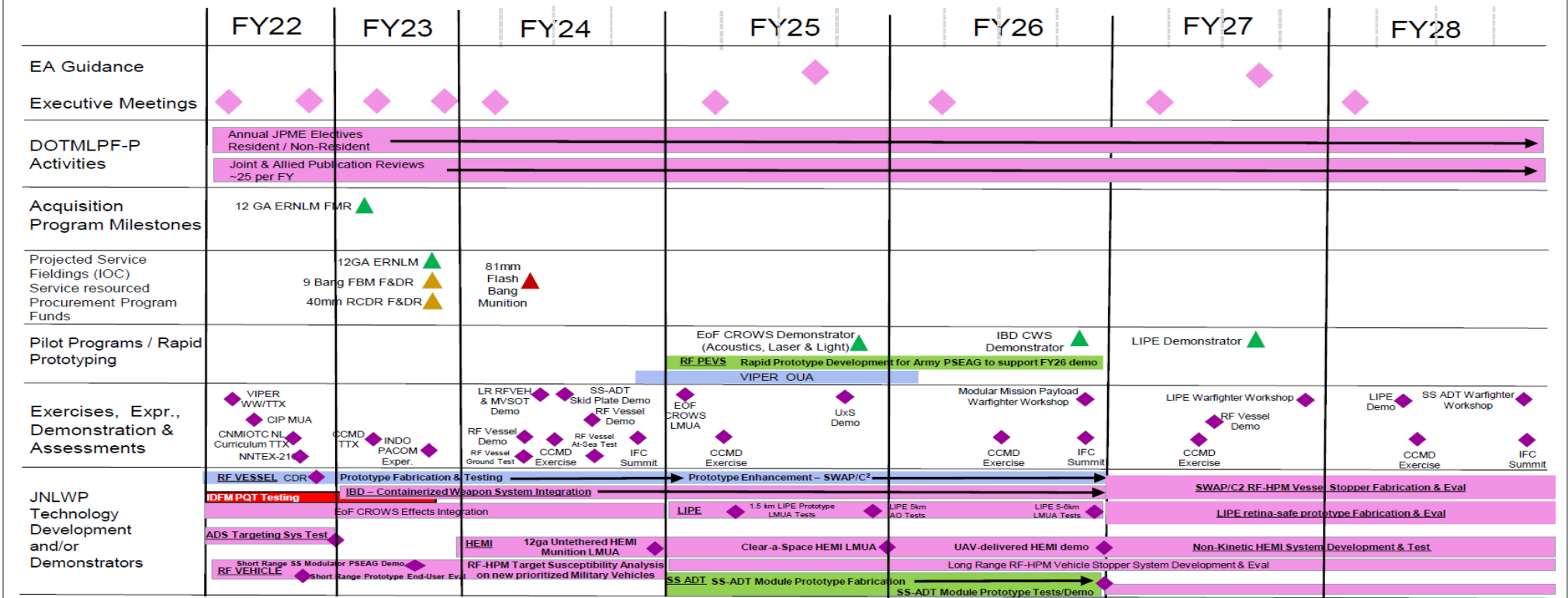
Date: March 2023

Appropriation/Budget Activity  
1319 / 4

R-1 Program Element (Number/Name)  
PE 0603851M / Joint Non-Lethal Weapons  
Testing

Project (Number/Name)  
2319 / Non-Lethal Weapons

DoD Non-Lethal Weapons Program – Executive Agent (EA) Joint Non-Lethal Weapons Program (JNLWP)



**Lead Agency**

- ▲ USMC
- ▲ USA
- ▲ USN
- ▲ USAF
- ▲ USSOCOM
- ▲ USCG
- ◆ JIFCO Led

9-Bang – Multi Bang Flashbang Grenage-9 Bang  
 CCMD – Combatant Command  
 EoF CROWS – Escalation of Force Common Remotely Operated Weapons Station  
 ERNLM – Extended Range Non-Lethal Munition  
 FMB – Flash Bang Munition  
 HEMI – Human Electro-muscular Incapacitation Technology  
 HiPR Actv – High Peak-power Radio-Frequency Assessment and Capability  
 IBD – Integrated Base Defense System  
 IFC – Intermediate Force Capabilities

JIFCO – Joint Intermediate Force Capabilities Office/DoD NLW Program  
 LIPE – Laser Induced Plasma Effects  
 MVSOT – Maritime Vessel Stopping Occlusion Technology  
 RCDR – Reduced Collateral Damage Round  
 RF Vehicle – Radio Frequency Vehicle Stopping Technology  
 RF Vessel – Radio Frequency Vessel Stopping Technology  
 SS ADT – Solid State Active Denial Technology

**UNCLASSIFIED**

<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2024 Navy		<b>Date:</b> March 2023
<b>Appropriation/Budget Activity</b> 1319 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603851M / <i>Joint Non-Lethal Weapons Testing</i>	<b>Project (Number/Name)</b> 2319 / <i>Non-Lethal Weapons</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>Proj 2319</b>				
RF Vessel - Radio Frequency Vessel Stopping Technology: Critical Design Review	4	2022	4	2022
Counter Materiel: 40mm Door Breach NL Round: F&DR	4	2023	4	2023
12 Gauge Extended Range Non-Lethal (12GA ERNL): IOC	4	2023	4	2023
9 Bang: F&DR	4	2023	4	2023
Radio Frequency Vessel Stopping Technology: Ground Test	2	2024	2	2024
12ga Untethered Human Electro-muscular Incapacitation Technology Munition: Limited User Military Assessment	4	2024	4	2024
Radio Frequency Vessel Stopping Technology: At-Sea Test	4	2024	4	2024
Laser Induced Plasma Effects Prototype: Limited User Military Assessment	2	2025	2	2025